

Hazardous according to criteria of Australian Safety and Compensation Council.

## 1 Identification

- **Product identifier**
- **Trade name:** Hionic-Fluor
- **Article number:** 6013319, 6013311
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**  
**Manufacturer:**  
PerkinElmer Health Sciences B.V.  
Rigaweg 22  
9723 TH Groningen  
The Netherlands  
Phone: +31 50 5445900  
Fax: +31 50 5445950  
www.perkinelmer.com
- **Manufacturer/Supplier:**  
**Australian contact address:**  
PerkinElmer  
Lvl 2, Bldg 5, Brandon Office Park  
530-540 Springvale Road  
Glen Waverley  
Melbourne  
VIC 3150  
Australia  
Telephone : +61 3-9212-8500
- **Further information obtainable from:**  
Quality Assurance, Environment, Safety & Health (QA/ESH)  
SDS.Groningen@perkinelmer.com
- **Emergency telephone number:**  
+31 50 5445971  
CHEMTREC (within Australia) +(61)-290372994  
CHEMTREC (from outside Australia) +1 703-527-3887

## 2 Hazard(s) Identification

- **Classification of the substance or mixture**



GHS02 flame

Flam. Liq. 3      H226 Flammable liquid and vapour.



GHS08 health hazard

Carc. 2      H351 Suspected of causing cancer.

Repr. 2      H361 Suspected of damaging fertility or the unborn child.

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**Trade name: Hionic-Fluor**

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GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H335 May cause respiratory irritation.

· **Label elements**

· **GHS label elements**

The product is classified and labelled according to the Globally Harmonised System (GHS).

· **Hazard pictograms**



GHS02



GHS05



GHS07



GHS08



GHS09

· **Signal word Danger**

· **Hazard-determining components of labelling:**

2,2'-iminodiethanol

Phosphoric acid, butyl ester

1,2,4-trimethylbenzene

Alkylphenol Polyglycoether

· **Hazard statements**

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H351 Suspected of causing cancer.

H361 Suspected of damaging fertility or the unborn child.

H335 May cause respiratory irritation.

H411 Toxic to aquatic life with long lasting effects.

· **Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P233 Keep container tightly closed.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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**Trade name: Hionic-Fluor**



















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- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition and Information on Ingredients

- **Chemical characterisation: Mixtures**
- **Description:** Mixture: consisting of the following components.

· **Dangerous components:**

95-63-6	1,2,4-trimethylbenzene   	40-60%
9016-45-9	Alkylphenol Polyglycoether   	2.5-10%
111-42-2	2,2'-iminodiethanol    Aquatic Chronic 3, H412	2.5-10%
12788-93-1	Phosphoric acid, butyl ester 	2.5-10%
78-40-0	Triethyl phosphate 	2.5-10%
9016-45-9	Alkylphenol Polyglycoether   	2.5-10%
12645-31-7	Phosphoric acid, 2-ethylhexyl ester  	2.5-10%
577-11-7	Sodium dioctyl sulphosuccinate  	2.5-10%

· **Non-dangerous components**

7732-18-5	water, distilled, conductivity or of similar purity	0-2.5%
92-71-7	2,5-Diphenyloxazole (PPO)	0-2.5%
13280-61-0	1,4-Bis-(2-methylstyryl)-benzene (bis-MSB)	0-2.5%

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

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**Trade name: Hionic-Fluor**

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#### **4 First Aid Measures**

- **Description of first aid measures**
- **General information:**  
*Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.*
- **After inhalation:**  
*Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.*  
*In case of unconsciousness place patient stably in side position for transportation.*
- **After skin contact:** *Immediately wash with water and soap and rinse thoroughly.*
- **After eye contact:** *Rinse opened eye for several minutes under running water. Then consult a doctor.*
- **After swallowing:** *If symptoms persist consult doctor.*
- **Information for doctor:**
  - **Most important symptoms and effects, both acute and delayed** *Headache*
  - **Indication of any immediate medical attention and special treatment needed**  
*No further relevant information available.*

#### **5 Fire Fighting Measures**

- **Extinguishing media**
- **Suitable extinguishing agents:**
  - Foam*
  - Fire-extinguishing powder*
  - Carbon dioxide*
- **For safety reasons unsuitable extinguishing agents:** *Water with full jet*
- **Special hazards arising from the substance or mixture** *No further relevant information available.*
- **Advice for firefighters**
- **Protective equipment:** *Mouth respiratory protective device.*

#### **6 Accidental Release Measures**

- **Personal precautions, protective equipment and emergency procedures**  
*Wear protective equipment. Keep unprotected persons away.*
- **Environmental precautions:**  
*Inform respective authorities in case of seepage into water course or sewage system.*  
*Do not allow to enter sewers/ surface or ground water.*
- **Methods and material for containment and cleaning up:**  
*Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).*  
*Dispose contaminated material as waste according to item 13.*  
*Ensure adequate ventilation.*
- **Reference to other sections**  
*See Section 7 for information on safe handling.*  
*See Section 8 for information on personal protection equipment.*  
*See Section 13 for disposal information.*

#### **7 Handling and Storage**

- **Handling:**
- **Precautions for safe handling** *Ensure good ventilation/exhaustion at the workplace.*

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- **Information about fire - and explosion protection:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls and personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the skin.  
Avoid contact with the eyes and skin.
- **Respiratory protection:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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Trade name: *Hionic-Fluor*

· Eye protection:



Tightly sealed goggles

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## 9 Physical and Chemical Properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Fluid
Colour:	Colourless
Odour:	Aromatic

· Change in condition

Melting point/freezing point:	-44 °C
Initial boiling point and boiling range:	170 °C

· Flash point: 48 °C

· Ignition temperature: 520 °C

· Auto-ignition temperature: Product is not selfigniting.

· Explosive properties: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· Explosion limits:

Lower:	1.1 Vol %
Upper:	7.0 Vol %

· Density at 20 °C: 0.97 g/cm<sup>3</sup>

· Solubility in / Miscibility with water:

Not miscible or difficult to mix.

· Viscosity:

Dynamic: Not determined.

· Other information

No further relevant information available.

## 10 Stability and Reactivity

· Reactivity No further relevant information available.

· Chemical stability

· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

· Possibility of hazardous reactions No dangerous reactions known.

· Conditions to avoid No further relevant information available.

· Incompatible materials: No further relevant information available.

· Hazardous decomposition products: Carbon monoxide and carbon dioxide

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## 11 Toxicological Information

- Information on toxicological effects
- Acute toxicity

· LD/LC50 values relevant for classification:

### ATE (Acute Toxicity Estimates)

Oral	LD50	<1,715 mg/kg
Dermal	LD50	6,043 mg/kg (Rabbit)
Inhalative	LC50/4 h	34.4 mg/l (Rat)

### 95-63-6 1,2,4-trimethylbenzene

Oral	LD50	3,400 mg/kg (Rat)
Dermal	LD50	3,160 mg/kg (Rabbit)
Inhalative	LC50/4 h	18 mg/l (Rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Irritant to skin and mucous membranes.
- **Serious eye damage/irritation** Strong irritant with the danger of severe eye injury.
- **Respiratory or skin sensitisation** No sensitising effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Harmful  
Irritant
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**  
Carc. 2, Repr. 2

## 12 Ecological Information

- Toxicity

· Aquatic toxicity:

### 95-63-6 1,2,4-trimethylbenzene

Inhalative	LC50	7.19-8.28 mg/l (Other fish)
	EC50/48h	6.14 mg/l (Daphnia magna)

### 9016-45-9 Alkylphenol Polyglycoether

Inhalative	LC50	10 mg/l (Other fish)
	EC50/48h	10 mg/l (Daphnia magna)

- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**  
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water  
Do not allow product to reach ground water, water course or sewage system.  
Danger to drinking water if even small quantities leak into the ground.  
Also poisonous for fish and plankton in water bodies.

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**Trade name: Hionic-Fluor**



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- Toxic for aquatic organisms.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

· <b>UN-Number</b>	
· <b>ADG, IMDG, IATA</b>	1993
· <b>UN proper shipping name</b>	
· <b>IMDG, IATA</b>	FLAMMABLE LIQUID, N.O.S. (1,2,4-trimethylbenzene)
· <b>Transport hazard class(es)</b>	
· <b>ADG</b>	
	
· <b>Class</b>	3 Flammable liquids.
· <b>Label</b>	3
· <b>IMDG, IATA</b>	
	
· <b>Class</b>	3 Flammable liquids.
· <b>Label</b>	3
· <b>Packing group</b>	
· <b>ADG, IMDG, IATA</b>	III
· <b>Environmental hazards:</b>	
· <b>Marine pollutant:</b>	No
· <b>Special marking (ADG):</b>	Symbol (fish and tree)
· <b>Special precautions for user</b>	Warning: Flammable liquids.
· <b>Hazard identification number (Kemler code):</b>	30
· <b>EMS Number:</b>	F-E, <u>S</u> -E

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- **Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.
- **UN "Model Regulation":** UN1993, FLAMMABLE LIQUID, N.O.S. (not viscous) (1,2,4-trimethylbenzene), ENVIRONMENTALLY HAZARDOUS, 3, III

**15 Regulatory information**

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Australian Inventory of Chemical Substances**

95-63-6	1,2,4-trimethylbenzene
111-42-2	2,2'-iminodiethanol
12788-93-1	Phosphoric acid, butyl ester
78-40-0	Triethyl phosphate
9016-45-9	Alkylphenol Polyglycolether
577-11-7	Sodium dioctyl sulphosuccinate
7732-18-5	water, distilled, conductivity or of similar purity
92-71-7	2,5-Diphenyloxazole (PPO)

· **Standard for the Uniform Scheduling of Medicines and Poisons**

111-42-2	2,2'-iminodiethanol	S5, S6
78-40-0	Triethyl phosphate	S6

· **Australia: Priority Existing Chemicals**

None of the ingredients is listed.

· **GHS label elements**

The product is classified and labelled according to the Globally Harmonised System (GHS).

· **Hazard pictograms**



GHS02 GHS05 GHS07 GHS08 GHS09

· **Signal word** Danger

· **Hazard-determining components of labelling:**

- 2,2'-iminodiethanol
- Phosphoric acid, butyl ester
- 1,2,4-trimethylbenzene
- Alkylphenol Polyglycolether

· **Hazard statements**

- H226 Flammable liquid and vapour.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H351 Suspected of causing cancer.
- H361 Suspected of damaging fertility or the unborn child.
- H335 May cause respiratory irritation.
- H411 Toxic to aquatic life with long lasting effects.

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**Trade name: Hionic-Fluor**

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· **Precautionary statements**

- P210 *Keep away from heat/sparks/open flames/hot surfaces. No smoking.*  
 P233 *Keep container tightly closed.*  
 P280 *Wear protective gloves/protective clothing/eye protection/face protection.*  
 P303+P361+P353 *IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.*  
 P304+P340 *IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.*  
 P305+P351+P338 *IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*

· **National regulations:**

· **Technical instructions (air):**

Class	Share in %
Wasser	0-2,5
NK	40-60

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**16 Other information**

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

· **Relevant phrases**

- H226 *Flammable liquid and vapour.*  
 H302 *Harmful if swallowed.*  
 H314 *Causes severe skin burns and eye damage.*  
 H315 *Causes skin irritation.*  
 H318 *Causes serious eye damage.*  
 H319 *Causes serious eye irritation.*  
 H332 *Harmful if inhaled.*  
 H335 *May cause respiratory irritation.*  
 H351 *Suspected of causing cancer.*  
 H361 *Suspected of damaging fertility or the unborn child.*  
 H373 *May cause damage to organs through prolonged or repeated exposure.*  
 H411 *Toxic to aquatic life with long lasting effects.*  
 H412 *Harmful to aquatic life with long lasting effects.*

- **Department issuing SDS:** Quality Assurance, Environment, Safety & Health (QA/ESH)

- **Contact:** SDS.Groningen@perkinelmer.com

· **Abbreviations and acronyms:**

- RID: *Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)*  
 ICAO: *International Civil Aviation Organisation*  
 ADR: *Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*  
 IMDG: *International Maritime Code for Dangerous Goods*  
 IATA: *International Air Transport Association*  
 EINECS: *European Inventory of Existing Commercial Chemical Substances*  
 ELINCS: *European List of Notified Chemical Substances*  
 CAS: *Chemical Abstracts Service (division of the American Chemical Society)*  
 LC50: *Lethal concentration, 50 percent*  
 LD50: *Lethal dose, 50 percent*  
 PBT: *Persistent, Bioaccumulative and Toxic*  
 vPvB: *very Persistent and very Bioaccumulative*  
 Flam. Liq. 3: *Flammable liquids – Category 3*  
 Acute Tox. 4: *Acute toxicity - inhalation – Category 4*

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**Trade name: Hionic-Fluor**

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*Skin Corr. 1A: Skin corrosion/irritation – Category 1A*  
*Skin Corr. 1B: Skin corrosion/irritation – Category 1B*  
*Skin Irrit. 2: Skin corrosion/irritation – Category 2*  
*Eye Dam. 1: Serious eye damage/eye irritation – Category 1*  
*Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A*  
*Carc. 2: Carcinogenicity – Category 2*  
*Repr. 2: Reproductive toxicity – Category 2*  
*STOT SE 3: Specific target organ toxicity (single exposure) – Category 3*  
*STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2*  
*Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2*  
*Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3*  
· **\* Data compared to the previous version altered.**

AU